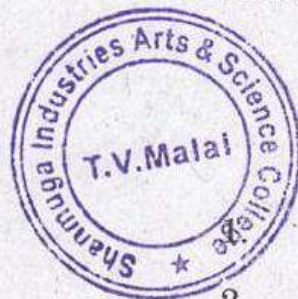


NOVEMBER/DECEMBER 2025

23PSCH25B — INDUSTRIAL CHEMISTRY

Time : Three hours

Maximum : 75 marks



SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Define statistical quality control (SQC)
2. What is meant by six sigma?
 3. Define drying process.
 4. What do you understand from climbing film evaporator?
 5. What is the need for desorption?
 6. Write a note on filter media.
 7. What is meant by calcination?
 8. Write a short note on polling.
 9. List any two methods of effluent disposal.
 10. Define HAZOP study.

SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL questions.

11. (a) What is the difference between drug substances and drug products.

Or

- (b) Discuss the principle of good laboratory products.

12. (a) List any two factors affecting the rate of evaporation.

Or

- (b) Explain the applications of rotary dryer.

13. (a) State the advantages and limitations of spray columns in the absorption process.

Or

- (b) Write a brief note on candle filters.

14. (a) Explain the aluminothermite reduction process.

Or

- (b) Discuss the principles and applications of gravity separation.

15. (a) What is the role of personal protective equipment (PPE) in industrial safety?

Or

- (b) List out the importance of molecular sensors and its applications.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. What is meant by ISO 14000 series of standards? Discuss their importance in industries.

17. Write the working principle and applications of steam distillation in chemical industries.

18. Draw in detail the working principle, construction, and applications of bag filters.

19. Explain in detail the various methods of ore concentration with examples.

20. Explain the common effluent treatment methods for dairy, tannery, or textile industries.

